



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Hohn et al. Art Unit : 2841
Serial No. : 09/830,038 Examiner : Tuan T. Dinh
Filed : July 17, 2001 Conf. No. : 9454
Title : ELECTRONIC COMPONENT AND COATING MEDIUM

Mail Stop Appeal Brief - Patents

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

BRIEF ON APPEAL

I. Real Party in Interest

The real party in interest is Osram GmbH, having a place of business at
Wernerwerkstrasse 2, 93049 Regensburg, Germany.

II. Related Appeals and Interferences

There are no related appeals or interferences.

III. Status of Claims

Pending claims 1-7, and 27-33 stand rejected and are appealed. Claims 8-26 are
cancelled.

IV. Status of Amendments

No amendments were filed subsequent to final rejection.

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V. Summary of Claimed Subject Matter

The independent claims define novel electro-optical components having a plastic housing that includes at least one metallic soldering area. The surface of the plastic housing of these claims, except for the metallic soldering area, is at least partially covered by an anti-solder coating that prevents solder adherence to the coating. A concise explanation of the subject matter of each independent claim follows, with citations to the specification.

A. Independent Claim 1

Independent claim 1 defines an electro-optical component having a plastic housing that includes at least one metallic soldering area (*see, e.g.*, pg. 1, lines 3-4). The surface of the plastic housing, except for the metallic soldering area, is at least partially covered by an anti-solder coating (*see, e.g.*, pg. 2, lines 6-7 and 10-11). The anti-solder coating prevents solder adherence to the coating (*see, e.g.*, pg. 2, lines 7 and 11).

B. Independent Claim 28

Independent claim 28 also defines an electro-optical component having a plastic housing that includes at least one metallic soldering area (*see, e.g.*, pg. 1, lines 3-4). The surface of the plastic housing, except for the metallic soldering area, is at least partially covered by an anti-solder coating (*see, e.g.*, pg. 2, lines 6-7 and 10-11). The anti-solder coating prevents solder adherence to the coating (*see, e.g.*, pg. 2, lines 7 and 11). Claim 28 further specifies that the component is an unsoldered component (*see, e.g.*, pg. 1, lines 18-20).

C. Independent Claim 29

Independent claim 29 also defines an electro-optical component having a plastic housing that includes at least one metallic soldering area (*see, e.g.*, pg. 1, lines 3-4). Claim 29 further specifies that the surface of the plastic housing, except for the metallic soldering area, is at least partially covered by an anti-solder coating prior to soldering the component at the soldering area (*see, e.g.*, pg. 1, lines 18-20; pg. 2, lines 6-7 and 8-11). The anti-solder coating prevents solder adherence to the coating (*see, e.g.*, pg. 2, lines 7 and 11).

D. Independent Claim 30

Independent claim 30 also defines an electro-optical component having a plastic housing that includes at least one metallic soldering area (*see, e.g.*, pg. 1, lines 3-4). The surface of the plastic housing, except for the metallic soldering area, is at least partially covered by an anti-solder coating (*see, e.g.*, pg. 2, lines 6-7 and 10-11). The anti-solder coating prevents solder adherence to the coating (*see, e.g.*, pg. 2, lines 7 and 11). Claim 30 further specifies that the component is apart from any support structure (*see, e.g.*, pg. 1, lines 18-20; pg. 2, lines 8-11).

E. Independent Claim 31

Independent claim 31 also defines an electro-optical component having a plastic housing that includes at least one metallic soldering area (*see, e.g.*, pg. 1, lines 3-4). The surface of the plastic housing, except for the metallic soldering area, is at least partially covered by an anti-solder coating (*see, e.g.*, pg. 2, lines 6-7 and 10-11). The anti-solder coating prevents solder adherence to the coating (*see, e.g.*, pg. 2, lines 7 and 11). Claim 31 further specifies that the coating has an end, and that the coating ends at the component (*see, e.g.*, pg. 1, lines 18-20; pg. 2, lines 6-11).

VI. Grounds Of Rejection To Be Reviewed On Appeal

A. Rejections under 35 U.S.C. § 103(a)

1. **Claims 1-7, 27-31, and 33 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Berger (U.S. Pat. No. 4,030,948) in view of Figure 2 (prior art) of the present application.**
2. **Claim 32 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Berger in view of Figure 2 (prior art) of the present application, and further in view of Schmid (U.S. Pat. No. 6,006,512).**

B. Objection

Claim 32 was objected to.

VII. Argument

A. Rejections under 35 U.S.C. § 103(a)

- 1. Claims 1-7, 27-31, and 33 were clearly not made obvious by Berger (U.S. Pat. No. 4,030,948) in view of Figure 2 (prior art) of the specification.**

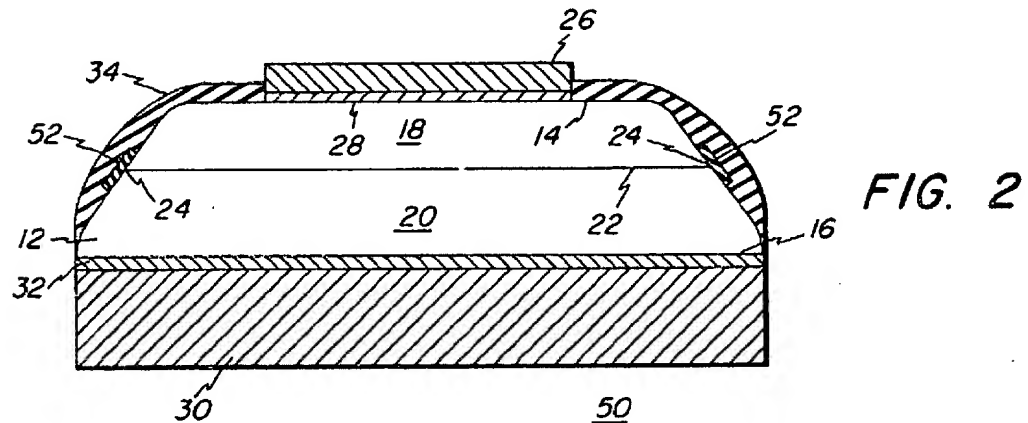
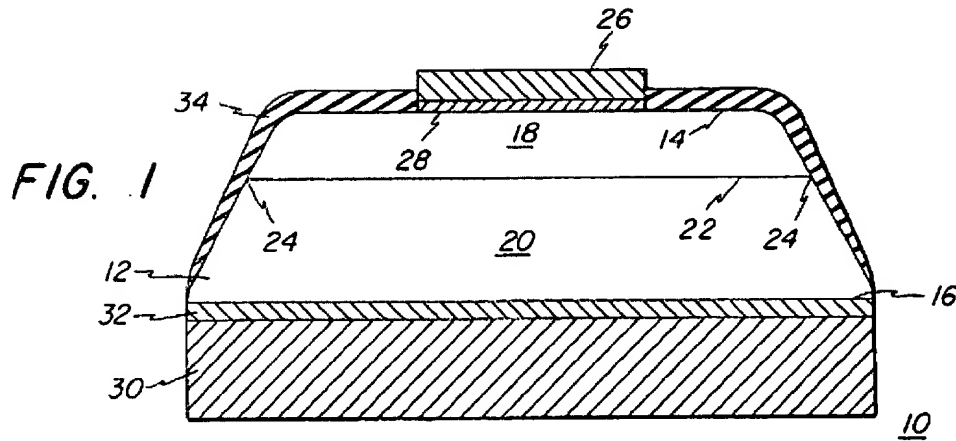
The rejection of claims 1-7, 27-31, and 33 is incorrect for at least several reasons. Specifically, the combination of Berger and Figure 2 neither explicitly nor inherently discloses all the limitations of the claims. Further, with respect to claims 2-6, Berger and Figure 2 do not disclose a coating consisting essentially of a siloxane. Each of these reasons independently requires reversal of the rejection.

- a) Berger in view of Figure 2 does not disclose a plastic housing that “is at least partially covered by an anti-solder coating” where the anti-solder coating prevents “solder adherence to the coating.”**

To establish a prima facie case of obviousness, the prior art reference must disclose or suggest all the claim limitations. *See CFMT, Inc. v. Yieldup Intern. Corp.*, 349 F.3d 1333, 1342, 68 U.S.P.Q.2d 1940 (Fed. Cir. 2003); *In re Royka*, 490 F.2d 981, 985, 180 USPQ 580 (CCPA 1974); MPEP § 2143 *et seq.*

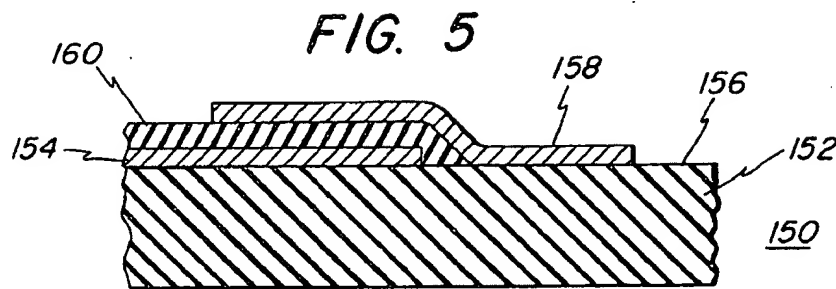
Berger in view of Figure 2 does not disclose or suggest all the limitations of independent claims 1, 28, 29, 30, or 31. Each of independent claims recites a plastic housing that “is at least partially covered by an anti-solder coating” where the anti-solder coating prevents “solder adherence to the coating.” Berger does not disclose or suggest an anti-solder coating that prevents solder adherence to the coating.

Rather, Berger discloses a coating layer that “should adhere very tenaciously to the surface to which it is applied.” Berger at Col. 3, lines 52-53. Berger first illustrates his coating layer as component 34 in Figs. 1 and 2:



Figs. 1 and 2 show Berger's coating layer 34 "adhering tenaciously" to the surface of the various components of his semiconductor parts (according to his specification at Col. 3, lines 52-53). In Figs. 1 and 2, component 26 is an electrical conductor, *i.e.*, a metal, and component 28 is solder. See Berger, Col. 3, lines 25-28. Thus, based on Berger's assertion that his coating layer "adhere[s] very tenaciously to the surface to which it is applied," the coating layer 34 in Figs. 1 and 2 is **adhering tenaciously to solder layer 28** as well as conductor 26.

As further description of what the "adhere very tenaciously" language means and the types of materials to which the coating layer "adhere[s] very tenaciously," Berger provides Fig. 5 and the following description of Fig. 5:



A first electrically conductive **metal** circuit 154 is disposed on a selected portion of the surface 158 [sic, should apparently be 156] of the board 152. A second electrically conductive **metal** circuit 158 is disposed on another portion of the surface 156 and overlies, in part, a portion of the circuit 154. The material of the circuits 154 and 158 **may be of copper, aluminum and the like**. A layer 160 of a suitable conformal coating material such, for example, as described with reference to the layer 32 [sic, should apparently be 34] of the elements 10 and 50, described heretofore, is disposed on at least the circuit 154. When cured in situ, **the material of the layer 160 shows excellent adherence to the board 152 and the material of the circuit 154. The metal of the layer 158 adheres well to the cured conformal coating material** and is electrically isolated thereby from the metal circuit 154.

Berger, Col. 10, lines 32-47 (emphasis added). As is clear from Berger's description, his conformal coating material "shows excellent adherence" to conductive metal circuit 154 as well as "adheres well" to the metal of layer 158.¹

In stark contrast to these explicitly disclosed adherence features of Berger's coating material to solder and other metals, the anti-solder coating of claims 1, 28, 29, 30, and 31 have the **exact opposite** property—they **prevent** solder adherence to the coating. Berger simply does not disclose or suggest preventing solder adherence to the coating. The Examiner has, for a reason the Applicants' fail to understand, taken the position that the preventing solder adherence feature of claims 1, 28, 29, 30, and 31 is disclosed by Figs. 1 and 2 of Berger, because "the coating material (34) is adhesive tenaciously to the surface of the device." Office Action mailed March 20, 2006 at page 7. However, these portions of Berger do not even tentatively disclose or

¹ "Solder" is defined by the Merriam-Webster Online Dictionary as "1: a metal or metallic alloy used when melted to join metallic surfaces; *especially*: an alloy of lead and tin so used." Merriam-Webster Online Dictionary, <http://www.merriam-webster.com/cgi-bin/dictionary-tb?book=Dictionary&va=solder> (available October 27, 2006).

suggest the feature of claims 1, 28, 29, 30, and 31 of **preventing** solder adherence to the coating. Rather, as discussed above, Figs. 1, 2, and 5 explicitly disclose Berger's coating **adhering** to solder. Because Berger's coating adheres tenaciously to a wide variety of materials including solder and other metals, the Applicants assert that the only interpretation of Berger's disclosure is that solder would adhere to Berger's coating material.

b) Nor does Berger inherently disclose a plastic housing that "is at least partially covered by an anti-solder coating" where the anti-solder coating prevents solder adherence to the coating.

To the extent that the Examiner or Pre-Appeal Panel is asserting that Berger inherently discloses an anti-solder coating where the anti-solder coating prevents solder adherence to the coating, both the Examiner and the Pre-Appeal Panel have failed to demonstrate that such disclosure is necessarily present in Berger. Anticipation by inherency requires that the unstated element **necessarily** be present in the subject matter of the reference. "To establish inherency, the extrinsic evidence 'must make clear that the missing descriptive matter is **necessarily present** in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing **may result** from a given set of circumstances is not sufficient.'" *In re Robertson*, 169 F.3d 743, 745, 49 USPQ2d 1949, 1950-51 (Fed. Cir. 1999) (*quoting Continental Can Co. v. Monsanto Co.*, 948 F.2d 1264, 1268, 20 USPQ2d 1746, 1749 (Fed. Cir. 1991)) (emphasis added); *see Schering Corp. v. Geneva Pharms., Inc.*, 339 F.3d 1373, 1377, 67 USPQ2d 1664, 1667 (Fed. Cir. 2003). "The fact that a certain result or characteristic **may** occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic." MPEP § 2112, IV, p. 2100-54 (Rev. 2, May 2004) (*citing In re Rijckaert*, 9 F.3d 1531, 1534, 28 USPQ2d 1955, 1957 (Fed. Cir. 1993)) (emphasis in original).

As discussed above, Berger explicitly discloses his coating adhering tenaciously to solder and other metals. Rather than trying to speculate at what the Examiner was implying during prosecution, the Applicants simply observe that because Berger's coating is explicitly disclosed to adhere tenaciously to solder and other metals, a position claiming that an anti-solder coating that prevents solder adherence is inherently disclosed by Berger is untenable. Given Berger's

explicit disclosure of adherence to solder and other metals, there is no plausible argument that an anti-solder coating that prevents solder adherence even “may result” from Berger’s disclosure (which, in itself, would not even be enough of an assertion to support an inherency argument).

With respect to the Pre-Appeal Panel’s position, the Panel Decision from Pre-Appeal Review states that “Berger clearly discloses use of polysiloxane—which will inherently be solder unweldable—as the material of the coating.” Notice of Panel Decision from Pre-Appeal Brief Review mailed June 7, 2006. This statement is a gross oversimplification of Berger’s disclosure. The coating composition that Berger actually discloses is

a reaction product of a tetracarboxylic acid dianhydride, a diamine and a di(aminoalkyl) polysiloxane wherein the polysiloxane constitutes from 18 to 45 mole percent of the total diamines in the copolymer.

Berger at Col. 2, lines 7-12. Thus, according to Berger, his polysiloxane is in the form of a polysiloxane diamine that only constitutes 18-45 mole percent of the total diamine present in the coating.

The Pre-appeal Panel and the Examiner have failed to provide any shred of proof that the presence of Berger’s stated minor amount of polysiloxane in a coating composition **must necessarily** confer the same anti-solder properties recited in the present claims. Rather, Berger provides ample evidence that his coating **adheres tenaciously** to metals (as fully discussed above). Berger’s explicit disclosure of adherence easily overcomes this bare assertion of an inherent disclosure of non-adherence from the Pre-Appeal Panel. Because there is no evidence supporting the contention that Berger’s coating will have anti-solder properties and ample evidence that Berger’s coating adheres tenaciously to metals, a position that anti-solder properties are inherently disclosed is unsupportable.

For these reasons, the Applicants respectfully request that the rejection of claims 1, 28, 29, 30, and 31 under 35 U.S.C. § 103(a) be reversed.

Claims 2-7, 27, and 33 depend from independent claims 1, 28, 29, 30, and 31, and each recites limitations that further distinguish the claims from the disclosure of Berger combined

with Figure 2 under 35 U.S.C. § 103(a). The Applicants respectfully request that the rejection of these dependent claims under 35 U.S.C. § 103(a) be reversed as well.

c) Additionally, with respect to claims 2-6, Berger and Figure 2 do not disclose a coating “consisting essentially of a siloxane.”

The transitional phrase “consisting essentially of” typically precedes a list of ingredients in a composition claim and is “commonly used to signal a partially open claim in a patent.” *PPG Indus. v. Guardian Indus. Corp.*, 156 F.3d 1351, 48 USPQ2d 1351 (Fed. Cir. 1998). Use of the phrase “consisting essentially of” “signals that the invention necessarily includes the listed ingredients and is open to unlisted ingredients that **do not materially affect the basic and novel properties of the invention.**” *Id.*; see *Atlas Powder Co. v. E.I. du Pont de Nemours & Co.*, 750 F.2d 1569, 1574, 224 USPQ 409, 412 (Fed. Cir. 1984) (the phrase “excludes ingredients that would ‘materially affect the basic and novel characteristics’ of the claimed composition”) (emphasis added).

Dependent claim 2, which depends from each of the independent claims, recites that “the anti-solder coating consists essentially of a siloxane.” Each of the independent claims recite that the anti-solder coating prevents “solder adherence to the coating.” Claims 3-6, which depend from claim 2, further restrict claim 2 by specifying the type of siloxane used. In addition to not disclosing, inherently or otherwise, an anti-solder coating that prevents solder adherence to the coating as discussed above, Berger does not disclose a coating consisting essentially of a siloxane that prevents solder adherence to the coating.

Rather, Berger discloses a coating that includes siloxane and other ingredients that materially affect the properties of the coating such that adherence to solder and other metals is **promoted**. Specifically, Berger states:

In accordance with the teachings of this invention, there is provided a reaction product of a tetracarboxylic acid dianhydride, a diamine and a di(aminoalkyl) polysiloxane wherein **the polysiloxane constitutes from 18 to 45 mole percent of the total diamines in the copolymer.**

Berger at Col. 2, lines 7-12 (emphasis added); *see also* Col. 4, lines 34-36 (“silicone containing polyimide compositions wherein the silicone diamine constitutes from 18 to 45 mole percent of the total amine present”). And, as discussed in detail above, Berger’s coating adheres tenaciously to solder and other metals.

Thus, Berger’s coating contains an ingredient that materially affects its basic properties, namely, promotion of metallic adhesion. Because claims 2-6 incorporate the basic and novel limitation of the independent claims that the coating prevents solder adherence, Berger’s coating cannot be said to disclose the anti-solder coatings of claims 2-6. This result is not surprising because, as noted above, the polysiloxane diamine in Berger’s coating only constitutes 18-45 mole percent of the total diamine present in the coating – thus, the non-siloxane units comprise more than half the composition.

Furthermore, with respect to dependent claims 4-6, Berger does not disclose or suggest any of the more specific polysiloxane compositions recited in those claims, specifically, methyl-polysiloxane (claim 4), dimethyl-polysiloxane (claim 5), and polyether-modified dimethyl-polysiloxane (claim 6). To the contrary, as explained above, the Berger coating is a reaction product of a tetracarboxylic acid dianhydride, a diamine and a di(aminoalkyl) polysiloxane.

For this reason in addition to the reasons discussed above, the Applicants respectfully request that the rejection of claims 2-6 under 35 U.S.C. § 103(a) be reversed.

2. Claim 32 was not made obvious by Berger in view of Figure 2 of the application, and further in view of Schmid (U.S. Pat. No. 6,006,512).

The rejection of claim 32 is incorrect for at least three reasons. First, the combination of Schmid and Berger and Figure 2 do not disclose all of the limitations of claim 32. Second, there is no motivation to combine Schmid and Berger. Finally, Schmid is non-analogous art. Each of these reasons independently requires reversal of the rejection.

a) The combination of Schmid and Berger and Figure 2 do not disclose all the limitations of claim 32.

The combination of Schmid and Berger and Figure 2 do not disclose all of the limitations of claim 32. Claim 32, which depends from each of the dependent claims, recites “wherein the

anti-solder coating can be applied to the plastic housing from a hydrous solution” and includes from each of the independent claims the feature that the anti-solder coating prevents “solder adherence to the coating.” As conceded by the Examiner, Berger and Figure 2 fail to disclose “the coating applied to the plastic housing from a hydrous solution.” Schmid does not disclose depositing a coating on a plastic housing from a hydrous solution, and, therefore, does not make up for the deficiency identified by the Examiner in the combination of Berger and Figure 2. Further, as discussed in detail above, none of these references disclose an anti-solder coating that prevents solder adherence to the coating.

Schmid discloses a multi-stage plating process. In the first stage, nickel is deposited onto a *steel alloy* rotor cup from a hydrous nickel containing solution in a currentless plating process. Then, all but a designated portion of the plated rotor cup is protected with a temporary coating, such as wax. Finally, diamond particles are deposited onto the nickel coating of the unprotected area from a hydrous solution in a currentless plating process. If anything, Schmid's disclosure teaches that his plating process can plate nickel or diamond particles onto *metallic* nickel or steel surfaces, but cannot plate onto *waxy, i.e., plastic*, surfaces.

Because Schmid only discloses coating **metallic** surfaces from his hydrous solution and a **required feature** of his process is the **inability** of his plating materials to adhere to waxy, *i.e.*, plastic, surfaces, Schmid cannot be considered to disclose “the coating applied to the plastic housing from a hydrous solution” as asserted by the Examiner. Further, the metallic nickel coatings of Schmid do not disclose an anti-solder coating that prevents solder adherence to the coating. Rather, the metallic coatings of Schmid can only be considered to have high solder adherence.

b) There is no motivation to combine Schmid and Berger.

Federal Circuit case law “makes clear that the best defense against the subtle but powerful attraction of a hindsight-based analysis is rigorous application of the requirement for a showing of the teaching or motivation to combine prior art references.” *In re Dembiczak*, 175 F.3d 994, 999, 50 USPQ2d 1614, 1617 (Fed. Cir. 1999).

Schmid and Berger teach incompatible solvent systems. Schmid teaches depositing metallic nickel onto a substrate utilizing a chemical plating process employing an *aqueous* solvent system. In contrast, Berger teaches the synthesis of organic compounds in *organic solvents*. For example, Berger teaches in his Example 1, the reaction of 4,4'-methylenedianiline and 1,3-bis(δ -aminobutyl) tetramethyldisiloxane (which are organic materials) in *n*-methylpyrrolidone (which is an organic solvent). One of skill in the art would not be motivated to synthesize the organic compounds of Berger in the aqueous solvent systems of Schmid due to incompatibility issues between aqueous and organic solvent systems. Because Berger and Schmid teach incompatible solvent systems, motivation for their combination is only plausible through the impermissible use of hindsight using the present application as a template.

c) Schmid is non-analogous art, and, therefore, cannot reasonably be combined with Berger and Figure 2 to form an obviousness rejection.

If a reference is not in the applicant's field of endeavor, it must "be reasonably pertinent to the particular problem with which the inventor was concerned." *In re Oetiker*, 977 F.2d 1443, 1446, 24 USPQ2d 1443, 1445 (Fed. Cir. 1992). A reference is reasonably pertinent if it "logically would have commended itself to an inventor's attention in considering his problem." *In re Clay*, 966 F.2d 656, 659, 23 USPQ2d 1058, 1060-61 (Fed. Cir. 1992).

Schmid is directed to a mechanical rotor cup, which is a macroscopic mechanical tool. The present application is directed to electro-optical components having a plastic housing including a metallic soldering area. Because macroscopic mechanical tools cannot be said to be included in the applicant's field of endeavor, *i.e.*, electro-optical components, the question becomes whether a macroscopic mechanical tool patent would have logically commended itself to the inventors of the present application. The Applicants can think of no reason why a macroscopic mechanical tool patent would have commended itself to the inventors when the inventors were concerned with electrical-optical components. Even if—for the sake of argument—the embedded broad category of coating processes were considered to be pertinent, the aqueous inorganic and organic coating processes discussed above are so completely different that they are also non-analogous. Because Schmid and the present application are directed to

such different fields, these references cannot reasonably be combined with one another to form an obviousness rejection.

For these reasons, the Applicants respectfully request reversal of the rejection of claim 32 under 35 U.S.C. § 103(a) over Berger in view of Figure 2 and Schmid.

B. Objection

Claim 32 is objected to by the Examiner as follows:

Claim 32, line 2, is confuse because the applicant recited the term "can be" is render claimed, and that limitation is defined no positive structure.

Office Action of March 20, 2006, page 2. No statutory basis for this objection, such as 35 U.S.C. § 112, was provided.

To the extent this objection is understood, the Applicants contend that this claim is not unclear or confusing. Claim 32 is as follows:

32. An electro-optical component as in claim 1 or 28 or 29 or 30 or 31, wherein the anti-solder coating can be applied to the plastic housing from a hydrous solution.

Claim 32 fulfills the requirements of 35 U.S.C. §112 in that it contains reference to claims previously set forth and specifies a further limitation on those claims, namely that the "anti-solder coating can be applied to the plastic housing from a hydrous solution." Thus, the claimed coating has the property that it "can be applied to the plastic housing from a hydrous solution." (See also MPEP § 2114, which indicates that the features of a product claim can be recited structurally or functionally.)

Moreover, to the extent the rationale behind this objection is that Schmid coats from a hydrous solution, therefore, any coating from a hydrous solution is obvious, Schmid only plates metallic and diamond particles from hydrous solutions (as discussed above) and nowhere does he disclose that his non-metallic protective coating, *i.e.*, wax, could be applied via a hydrous solution.

Reversal of the Examiner's objection of claim 32 is respectfully requested.

VIII. Claims Appendix

A copy of the appealed claims is included in the Appendix of Claims.

IX. Evidence Appendix

No evidence submitted during prosecution is relied upon by this Appeal Brief, so no evidence is included in the Evidence Appendix.

X. Related Proceedings Appendix

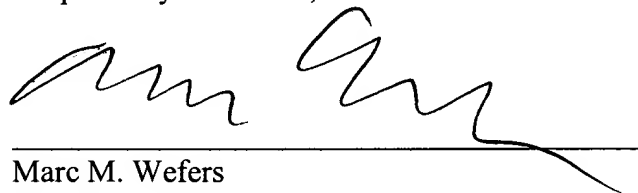
There are no related proceedings, so nothing is included in the Related Proceedings Appendix.

A check in the amount of \$500.00 for the Brief on Appeal Fee and a check in the amount of \$1,590.00 for the extension fee is enclosed. Please apply any other charges or credits to Deposit Account No. 06-1050, referencing 12406-017001.

Respectfully submitted,

Date: _____

11/17/06



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Appendix of Claims

1. An electro-optical component having a plastic housing that includes at least one metallic soldering area, characterized in that the surface of the plastic housing, except for the metallic soldering area, is at least partially covered by an anti-solder coating that prevents solder adherence to the coating.
2. An electro-optical component as in Claim 1 or 28 or 29 or 30 or 31, characterized in that the anti-solder coating consists essentially of a siloxane.
3. An electro-optical component as in Claim 2, characterized in that the anti-solder coating consists essentially of a polysiloxane.
4. An electro-optical component as in Claim 3, characterized in that the anti-solder coating consists essentially of a methyl-polysiloxane.
5. An electro-optical component as in Claim 4, characterized in that the anti-solder coating consists essentially of a dimethyl-polysiloxane.
6. An electro-optical component as in Claim 5, characterized in that the anti-solder coating consists essentially of a polyether-modified dimethyl-polysiloxane.
7. An electro-optical component as in claim 1, characterized in that the plastic housing contains a radiation-emitting and/or radiation-detecting semi-conductor element that is embedded in transparent plastic for the emitted and/or received radiation.
- 8.-26. (Cancelled)

27. An electro-optical component as in claim 1 wherein said component is a surface-mountable radiation-emitting and/or radiation-sensitive electro-optical component.

28. An electro-optical component having a plastic housing that includes at least one metallic soldering area, characterized in that the surface of the plastic housing, except for the metallic soldering area, is at least partially covered by an anti-solder coating, wherein said component is an unsoldered component, said anti-solder coating preventing solder adherence to the coating.

29. An electro-optical component having a plastic housing that includes at least one metallic soldering area, characterized in that the surface of the plastic housing, except for the metallic soldering area, is at least partially covered by an anti-solder coating prior to soldering of said component at said soldering area, said anti-solder coating preventing solder adherence to the coating.

30. An electro-optical component having a plastic housing that includes at least one metallic soldering area, characterized in that the surface of the plastic housing, except for the metallic soldering area, is at least partially covered by an anti-solder coating, wherein said component is apart from any support structure, said anti-solder coating preventing solder adherence to the coating.

31. An electro-optical component having a plastic housing that includes at least one metallic soldering area, characterized in that the surface of the plastic housing, except for the metallic soldering area, is at least partially covered by an anti-solder coating, wherein said coating has an end, and said coating ends at said component, said anti-solder coating preventing solder adherence to the coating.

32. An electro-optical component as in claim 1 or 28 or 29 or 30 or 31, wherein the anti-solder coating can be applied to the plastic housing from a hydrous solution.

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33. An electro-optical component as in claim 1 or 28 or 29 or 30 or 31, wherein the electro-optical component is an electro-optical receiving or transmitting device.

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Evidence Appendix

None.

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Related Proceedings Appendix

None.